

DRAFT
SCAG FY 02-03 OVERALL WORK PLAN
MODELING SECTION

OBJECTIVES:

To provide quality transportation and air quality modeling support for the Regional Transportation Plan (RTP), Regional Transportation Improvement Program (RTIP), and other major transportation and air quality studies throughout the SCAG Region.

To coordinate transportation modeling activities within the Region and facilitate Region-wide model consistency.

To provide quality modeling services by maintaining and upgrading SCAG's regional modeling tools.

ON GOING PROJECTS:

1. Regional Transportation Modeling Support

TASK 1. Provide modeling services in support of implementing and refining the Regional Transportation Plan. Apply SCAG's Regional Transportation Model to test various alternative development, provide sensitivity analysis, and land use alternatives requested by other SCAG departments, and policy committees, and other government agencies.

TASK 2. Provide modeling services for major transportation project studies within the Region. Provide modeling services for the High Occupancy Travel and Tolls (HOT), Goods Movement study, modeling support for the environmental sensitive corridor evaluations, and transit restructuring study.

TASK 3. Apply SCAG's Regional Transportation Model to analyze the Federal and State Transportation Improvement Programs (FTIP and STIP) amendments. Update the Regional Transportation Model to be consistent with the most recent socio-economic and transportation system assumptions. Prepare a report documenting the model assumptions, the study methodology, and the findings.

TASK 4. Conduct the emission analysis for air quality conformity for the Federal and State Transportation Improvement Programs. Use the Direct Travel Impact Model (DTIM) based on the most recently adopted socio-economic data, current travel statistics, and approved emissions factors. Also perform the necessary transportation modeling and air quality analysis for the development of the Air Quality Plan. Prepare a report documenting model assumptions, study methodology, and findings.

TASK 5. Coordinate the efforts of the numerous agencies in the Region developing and using transportation models. Be an active participant in Federal, State, subregional, and local modeling programs. Continue to work with the Modeling Task Force to coordinate the Region's modeling activities, promote model consistency, review technical assumptions, and provide guidance to SCAG's Regional Modeling Program.

TASK 6. Provide funding for SCAG's Software and computer system support. Funds needed to maintain and purchase modeling software and provide programming support for the UNIX system.

2. Regional Transportation Model Improvement

TASK 1. Continue development of the air passenger demand and air cargo models.

TASK 2. Enhance the High Occupancy Vehicle (HOV) modeling methodology and forecasting capability.

TASK 3. Improve the Heavy Duty Truck Model based on the Heavy Duty Truck Counts Study

TASK 4. Incorporate the new Parking Cost Model into SCAG's Regional Transportation Model

3. Sub-regional Modeling Support

TASK 1. Subregional Modeling Support - Provide modeling services to subregions in support of their transportation planning programs.

TASK 2. Model Coordination - Coordinate subregional modeling programs with SCAG's Regional Modeling program. Promote region wide model consistency and provide technical assistance to Subregional Modeling agencies.

TASK 3. – Subregional Model Methodology – Develop new methodologies and procedures to apply SCAG's Regional Model at a sub-regional level.

TASK 4. – Subregional Model Consistency – Assist subregions to integrate SCAG's Subregional modeling methodology into their subregional models. Tasks include updating subregional model's Transportation Analysis Zones (TAZ), transportation networks, speed assumptions, capacities, and implementing a truck forecasting component.

NEW PROJECTS

1. Calibrate Trip Generation Model
2. Calibrate Trip Distribution Model
3. Calibrate Model Choice Model
4. Year 2000 Model Validation
5. Develop External and Through trip forecasting model
6. Conduct Arterial Average Speed Study
7. Develop capacity-constrained transit assignment model
8. Consolidate both transit and highway network (continuous from previous fiscal year)
9. Implementation of model consistency among agencies in the SCAG Region